MODEL PC-1500A
SERVICE MANUAL

File this manual into the service manual "PC-1500 & Option"

1. General

Since the PC-1500A is a revised version of the PC-1500 with more memory capacity, its functions are almost identical to the PC-1500 except for the memory size. This manual therefore deals with the items that differ from the PC-1500. For other functions, refer to the PC-1500 Service Manual.

2. Main differences

2-1. Change in RAM capacity

	PC-1500	PC-1500A
User RAM: HM-6116	1 pc	4 pcs
System RAM: TC-5514P	2 pcs	0

2-2. Change in specification

	PC-1500	PC-1500A
System ROM	16 K Bytes	→
Standard RAM capacity	3.5 K Bytes	8.5 K Bytes
System area	0.9 K Bytes	→
Input buffer	80 Bytes	→
Stack	196 Bytes	→
User area	2.6 K Butes	7.6 K Bytes
Fixed memory area (A ~ Z, A$ ~ Z$)	624 Bytes	→
Basic program data area	1850 Bytes	5946 Bytes
Reserve area	188 Bytes	→
Machine language area		1024 Bytes

2-3. Change in 40 pin module connector signal names

	PC-1500		PC-1500A
Signal name	S1	→	S3
	S2	→	S4
	S3	→	S5

3. Program and peripheral compatibility

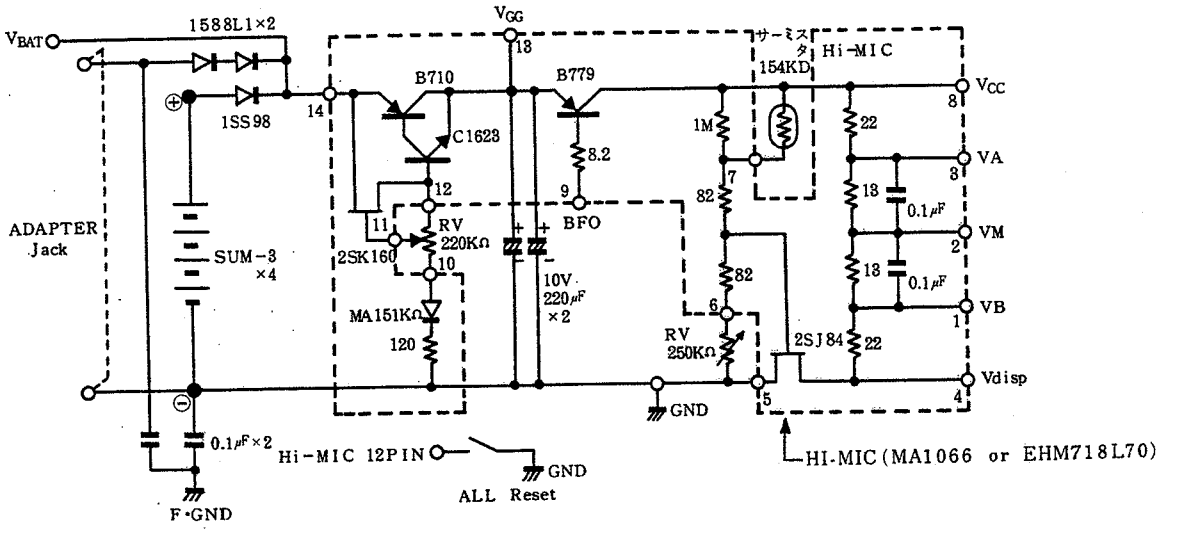
Programs developed for the PC-1500 can all be used for the PC-1500A. All PC-1500 options can also be used for the PC-1500A.

4. PARTS LIST & GUIDE (Listing items exclusive to the PC-1500)

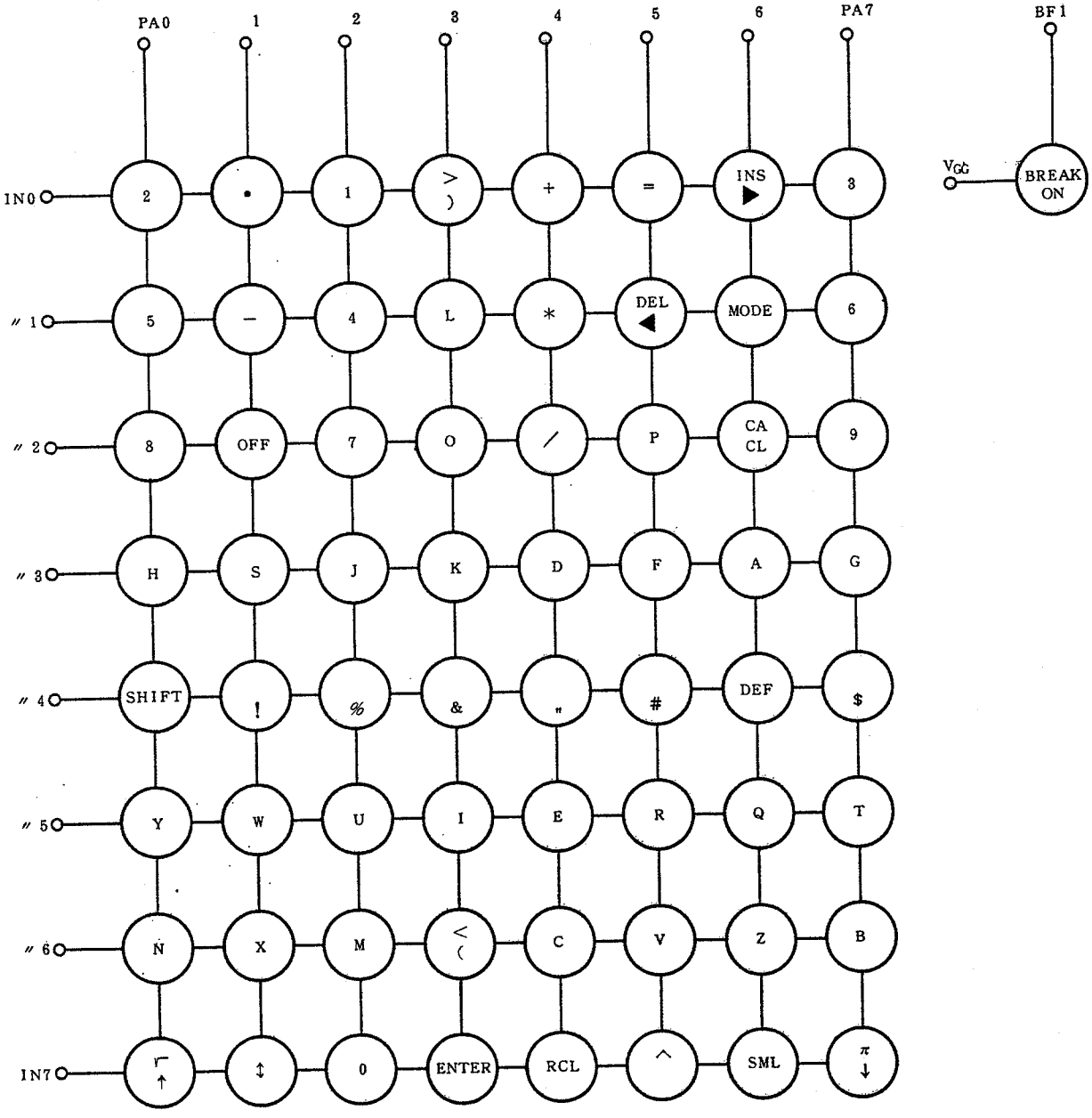
NO.	PARTS CODE	PRICE RANK	NEW MARK	PARTS RANK	DESCRIPTION
2	DUNTG7563CCZZ	A U	N	D	Cabinet top unit
13	DUNTK7529CCZZ	C C	N	E	Key PWB unit
26	DUNTK7530CCZZ	B X	N	E	Calculation PWB unit
27	DUNTG7562CCZZ	A R	N	D	Bottom cabinet (with battery terminal)
37	GFTABI266CC01	A C	N	D	Lid for battery
	LX-BZ1139CCZZ	A A		C	Screw
	PCAPHI006CCZZ	A F		C	Cap
	PTPEHI014CCZZ	A A		C	Adhesive tape
	PSHEGI035CCZZ	A A		C	Sheet
	PSHEPI081CCZZ	A A		C	Protect sheet
	PZETLI292CCZZ	A A		C	Insulator
	QCNTMI051CCZZ	A B		C	Reset terminal
	QCNW-I209CCZZ	A C		C	Lead wire
	SPAKA8097CCZZ	A H	N	D	Packing cushion
	SPAKC8096CCZZ	A K	N	D	Packing case
	TCADHI655CCZZ	A B	N	D	Operation card
	TCADUI595CCZZ	A C		D	Accessory card
	TCADUI664CCZZ	A C	N	D	User card
	TCADHI657CCZZ	A B		D	Operation card (Franch)
	TCADHI658CCZZ	A B		D	Operation card (Spanish)
	TiNSE3976CCZZ	A W	N	D	Inst. book (U.S.A.)
	TiNSE3977CCZZ	A Y	N	D	Inst. book (English)
	TiNSG3993CCZZ	A T	N	D	Inst. book (Germany)
	TMANFI026CCZZ	A Z		D	Program library (French)
	TMANSI027CCZZ	A Z		D	Program library (Spanish)
	TLABZI295CCZZ	A A		D	Name label
	RC-KZI022CCNI	A B		C	Capacitor 39PF
	VHiMAI066//-I	A T		B	i.C. (Power regurator)
	VHiSC613128F4	B F		B	L.S.i.
	VRS-TP2BDI05J	A A		C	Resistor 1/8W 1000Kohm ±5%

5. PC-1500A KEY & POWER SUPPLY CIRCUIT

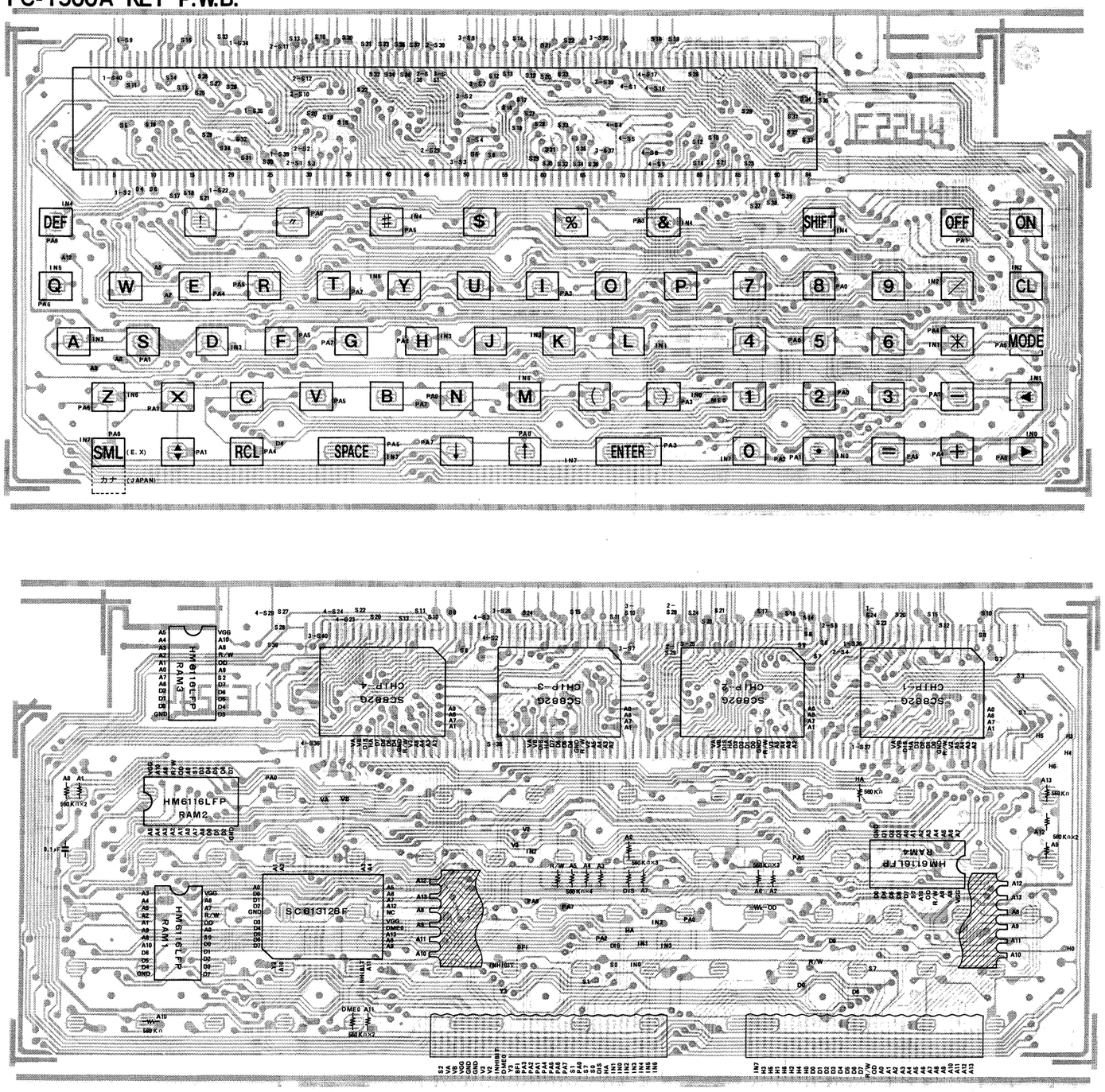
(Same as PC-1500)



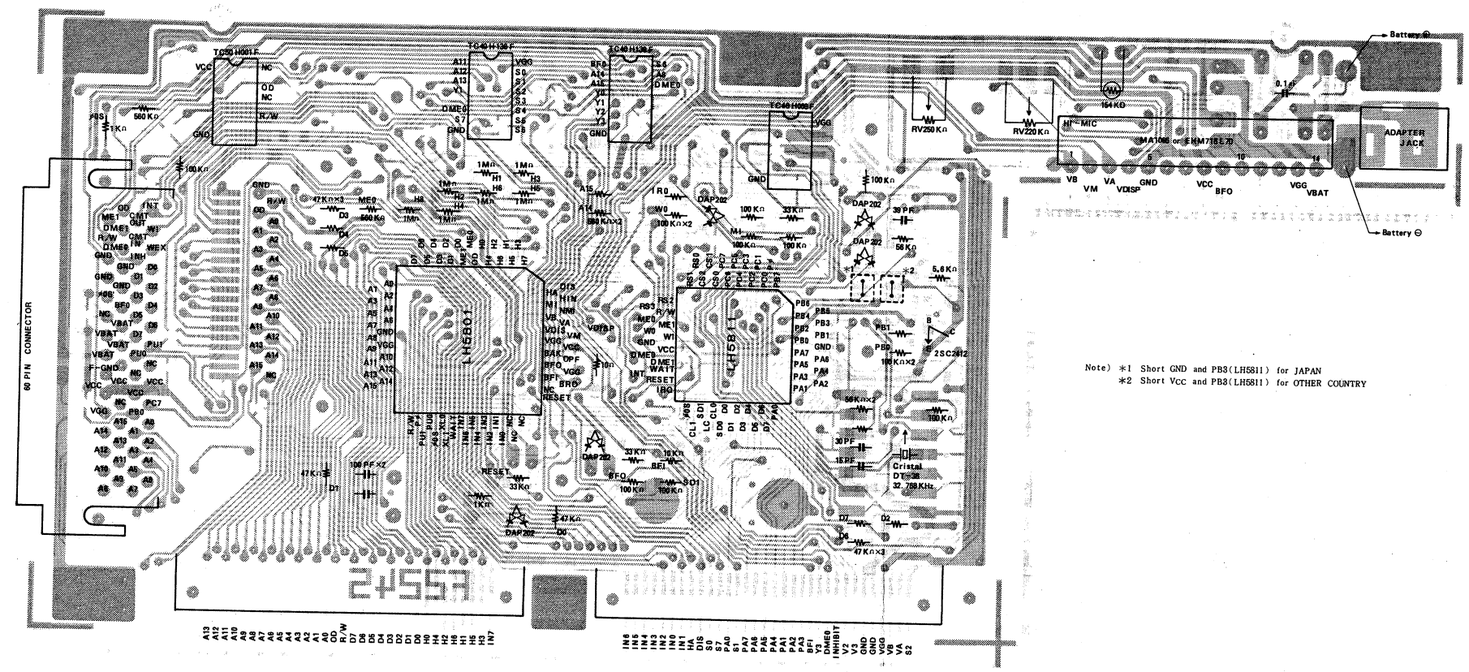
KEY MATRIX



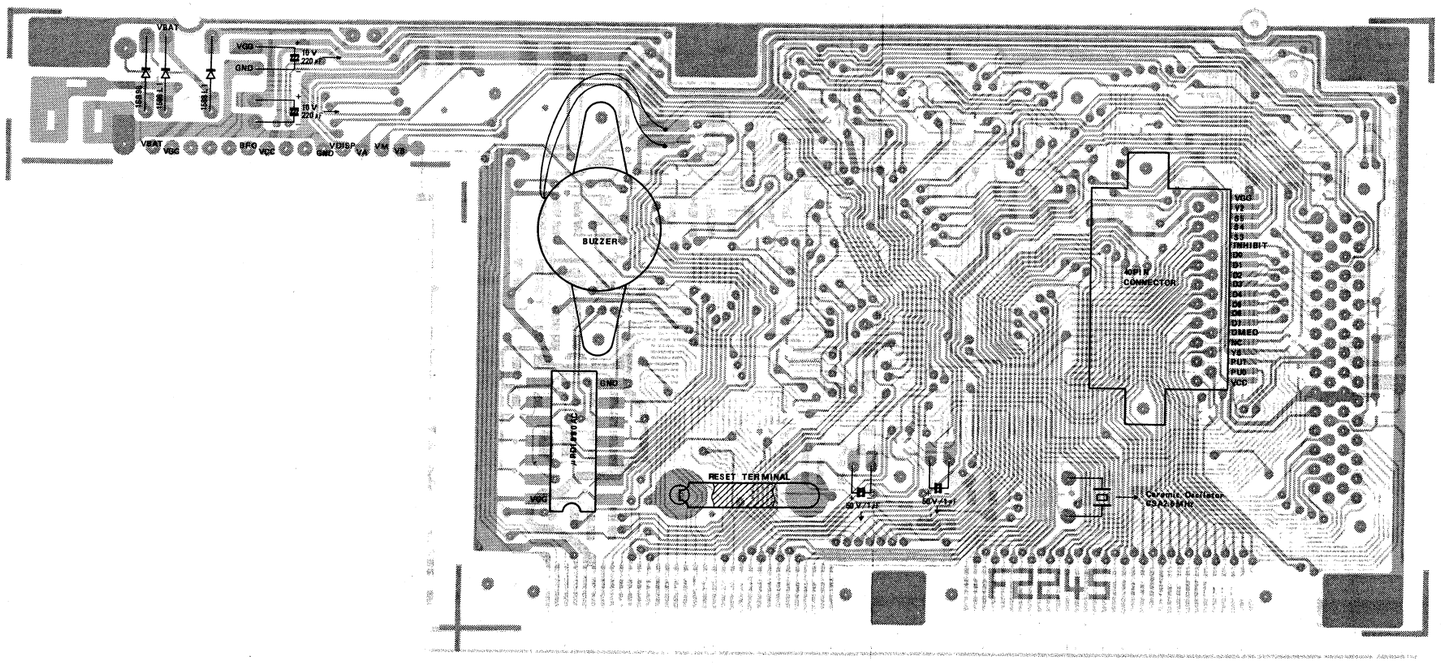
6. PC-1500A KEY P.W.B.



7. PC-1500A MAIN P.W.B.



Note) *1 Short GND and PB3(LH5811) for JAPAN
*2 Short Vcc and PB3(LH5811) for OTHER COUNTRY



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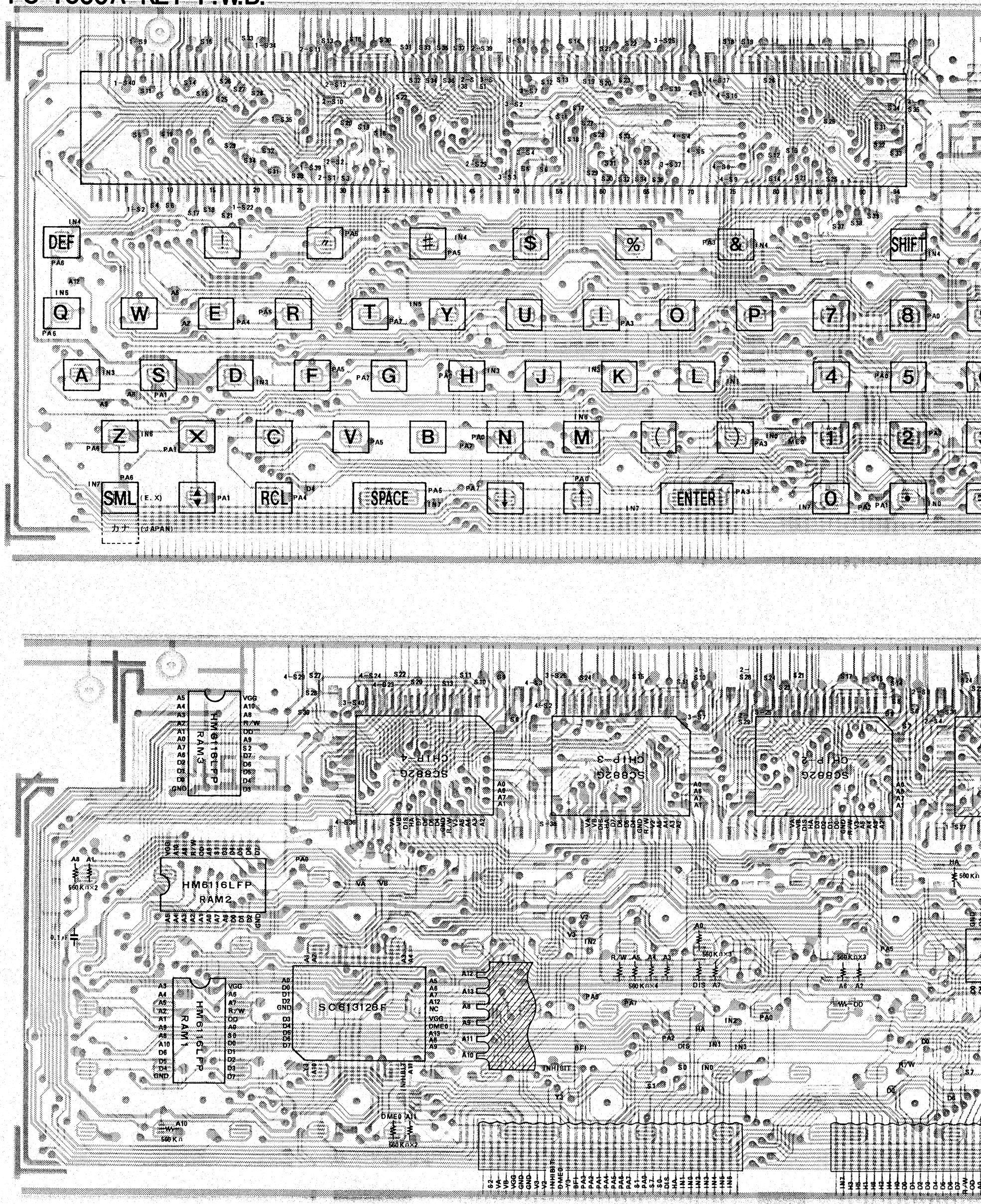
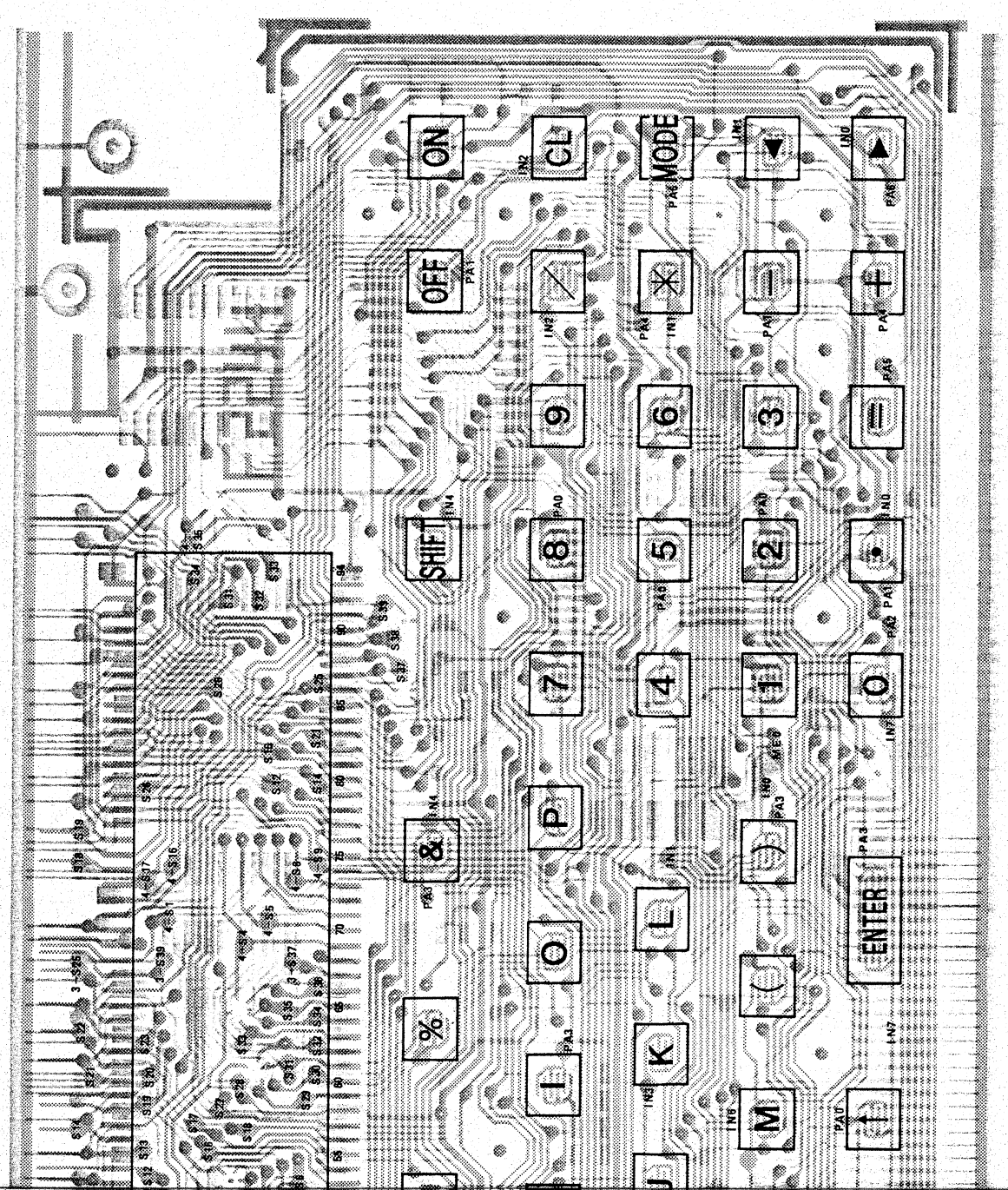
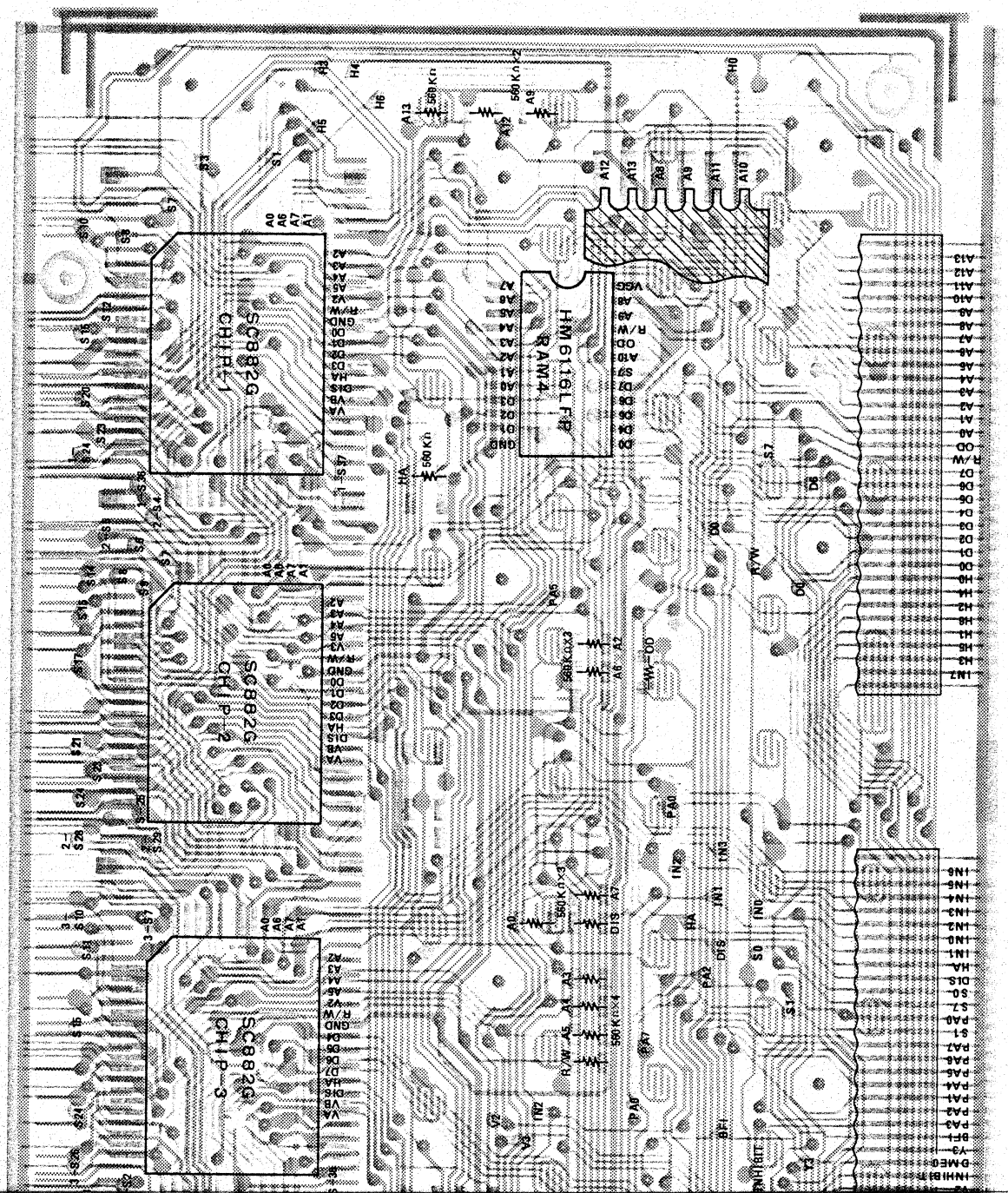
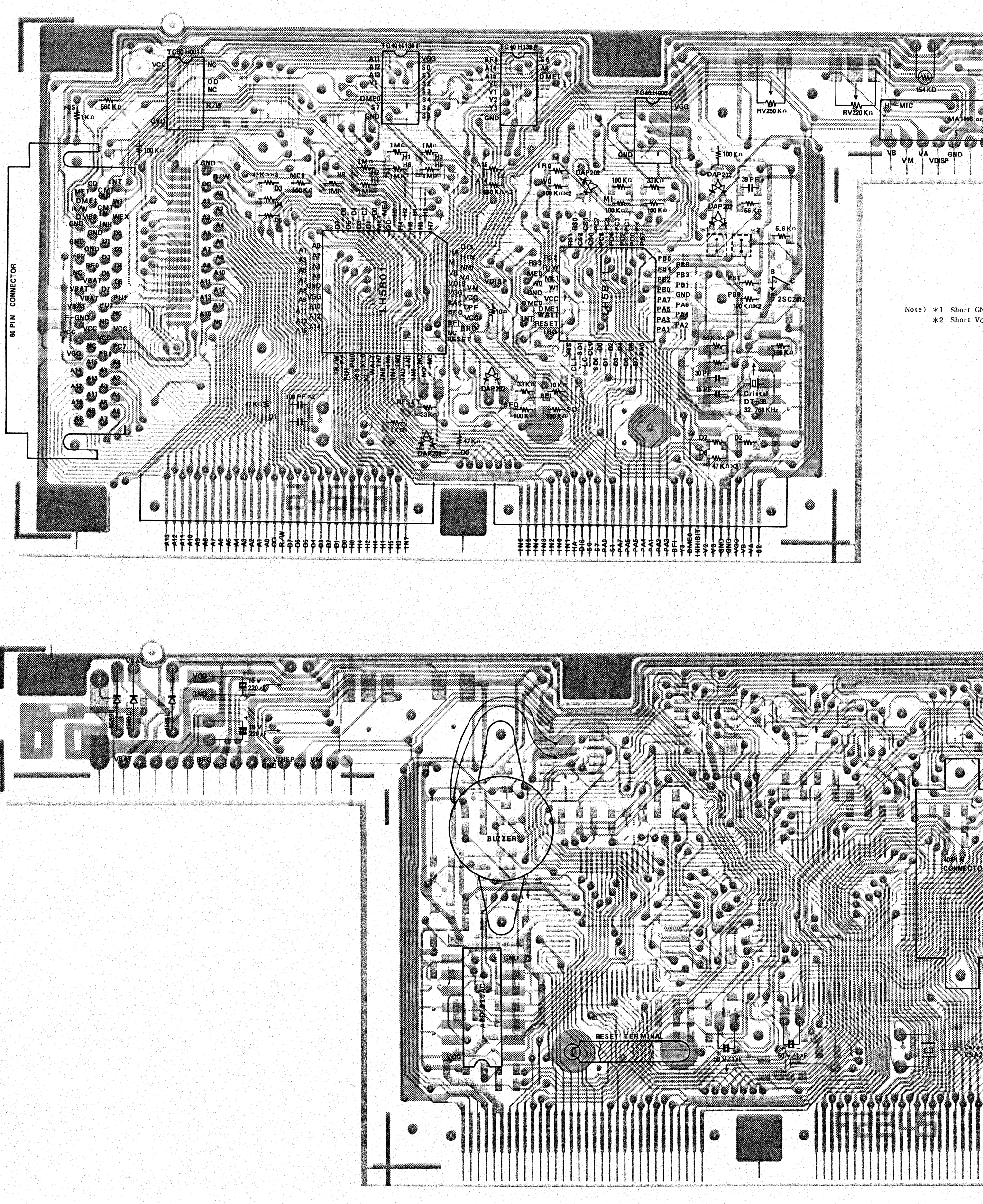
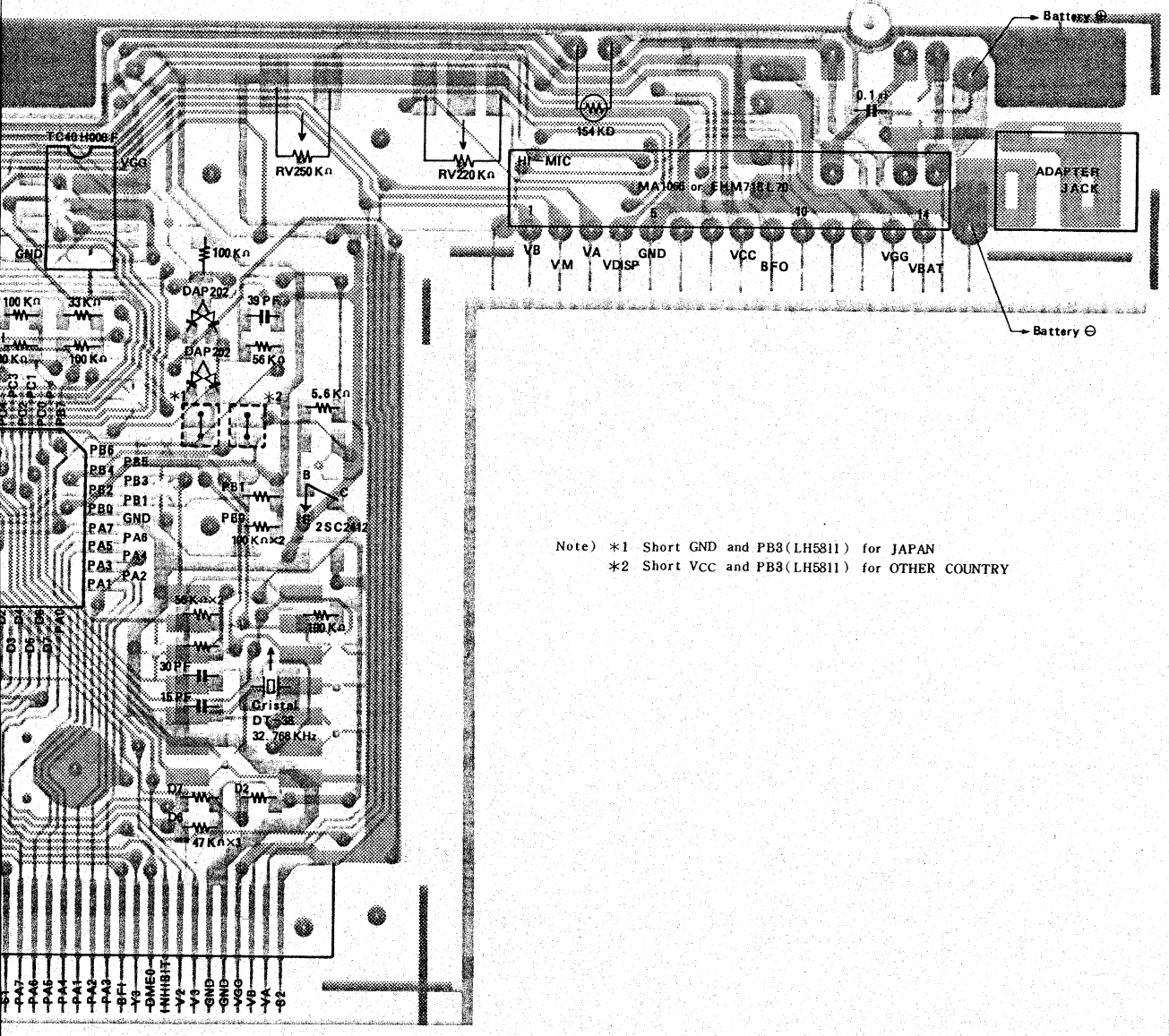



ON
CL
MODE
OFF
SHIFT
ENTER


SSB820G
CHIP-1
SSB820G
CHIP-2
SSB820G
CHIP-3
HM6116LFP
RAM1

7. PC-1500A MAIN P.W.B.





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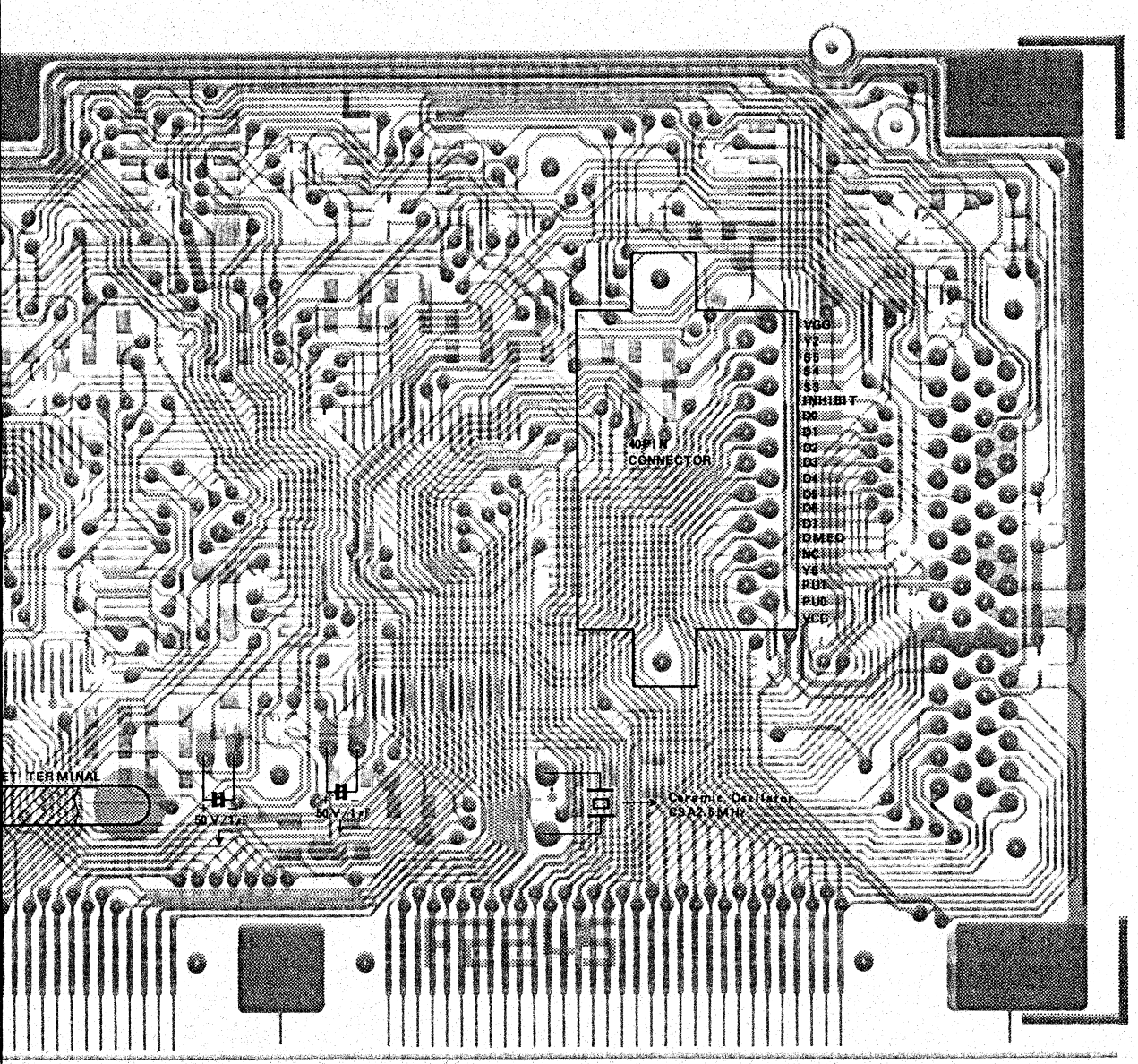
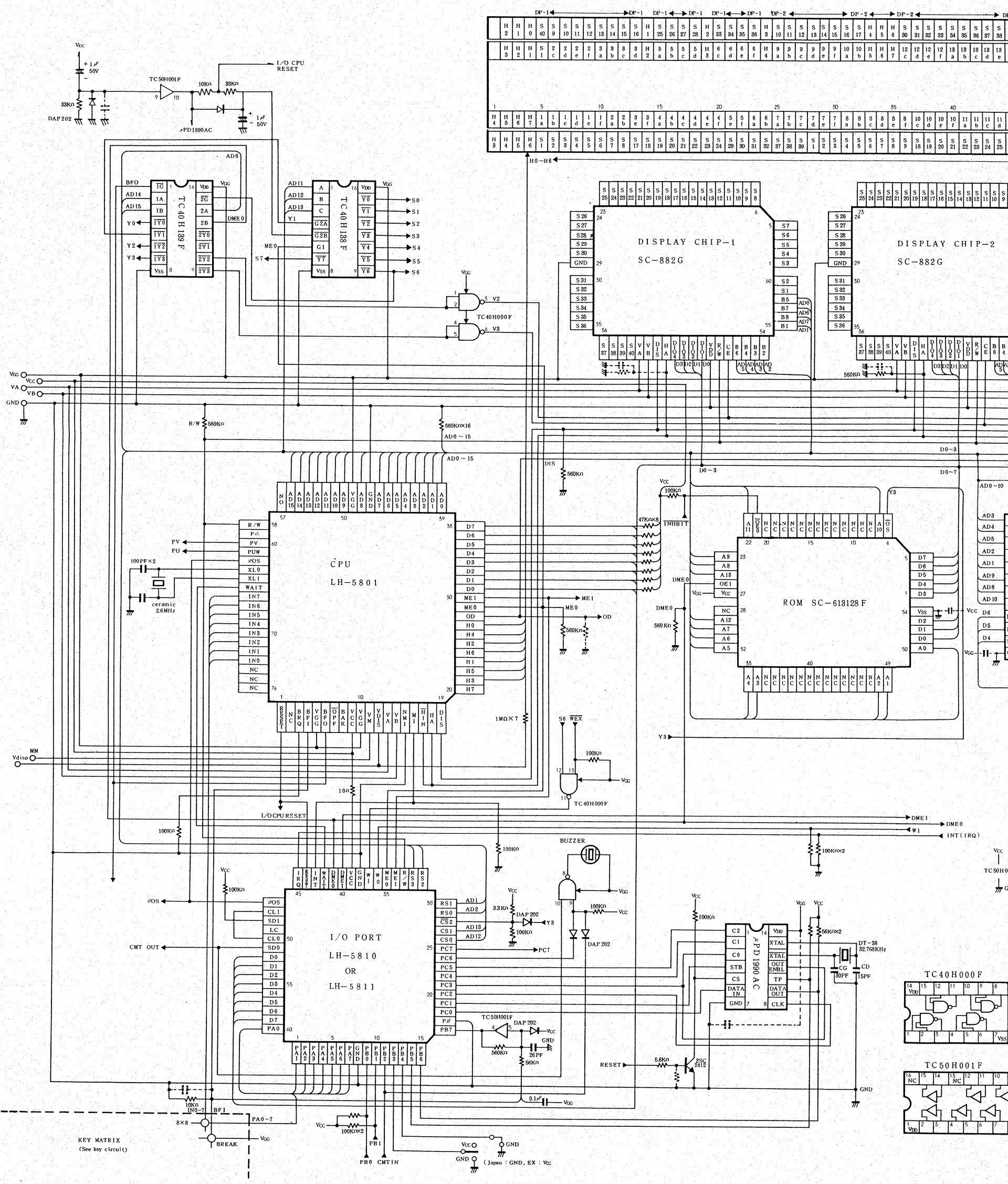


8. PC-1500A MAIN CIRCUIT DIAGRAM



LF8082GE

DISPLAY CHIP-1 SC-882G

DISPLAY CHIP-2 SC-882G

DISPLAY CHIP-4 SC-882G

DISPLAY CHIP-8 SC-882G

ROM SC-618128F

RAM1 HM6116LFP

RAM2 HM6116LFP

RAM3 HM6116LFP

RAM4 HM6116LFP

CONNECTOR 40pin

MODULE

ADDRESS BUS A0-15

DATA BUS D0-7

R/W

OD

ME1

DME0

DME1

PU

PV

POS

WEX

W1

INT(IRQ)

INHIBIT

BFO

CMT OUT(SDO)

CMT IN (PB2)

(PB0)

(PB1)

PC7

Vcc

GND×4

VBAT×4

VCC×4

F GND×2

CONNECTOR 60pin

μPD1990AC

TC40H000F

TC50H001F

TC4011001F

TC4011000F

DAP202

BUZZER

RESET

CT 68 32.768KHz

CG 30PF

CD 15PF

1MΩ×7

560KΩ×16

100KΩ×2

47KΩ×8

Jsam : GND, EX : Vcc